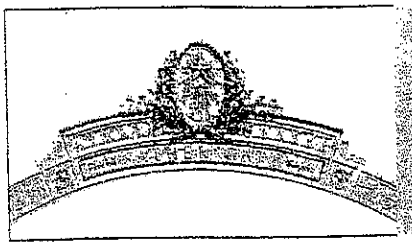

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New UC-led report says climate action promotes economic growth in the state

FOR IMMEDIATE RELEASE

Berkeley — A team of two dozen prominent experts led by professors from the University of California, Berkeley, released a new report today (Monday, Jan. 23) on the economic implications of meeting global warming emissions reduction targets established by Gov. Arnold Schwarzenegger in 2005.

The governor's goals include reducing greenhouse gas (GHG) emissions to 2000 levels by the year 2010, and to 1990 levels by 2020.

"Managing Greenhouse Gas Emissions in California," the first report in a series of economic and technology assessments, finds that just eight policy strategies can take California halfway to the governor's 2020 targets, while increasing the Gross State Product by approximately $60 billion and creating more than 20,000 new jobs.

"Our study demonstrates that taking action to reduce global warming emissions in California is good for the California economy," said Michael Hanemann, UC Berkeley professor of agricultural and resource economics and co-author of the report. "Our research indicates that not only does climate action pay, but early climate action pays more."

The report will be presented to the California Climate Action Team, a state task force established by Schwarzenegger, during public hearings today. It corroborates the state's recent findings

- more -

that the governor's targets can be achieved with net economic benefits. Using the Berkeley Energy and Resources model, a state-of-the-art, economy-wide forecasting tool, the team analyzed eight strategies in detail, tracing complex market interactions across key elements of the California economy. The team also evaluated the importance of technological innovation and market-based incentives in meeting the governor's goals.

"Our model is designed to capture the economy-wide implications of policies," said David Roland-Holst, UC Berkeley adjunct professor of agricultural and resource economics and report co-author. "The climate action strategies benefit California economically because innovation and efficiency save money for California consumers, who re-direct their spending in ways that stimulate in-state job growth."

The report also analyzed the economic impacts of taking the lead in adopting policies to reduce GHG emissions. It concludes that "just as Silicon Valley gained economically from being the leader in the Internet revolution, so, too, will California gain an economic advantage from being the leader in the new technologies and the new industries that will come into existence worldwide around the common goal of reducing GHG emissions."

"Our analysis reveals the power and promise of taking early initiative," concluded Alex Farrell, assistant professor at UC Berkeley's Energy and Resources Group and co-author of the report. "By acting sooner, California benefits more quickly from faster economic growth and improves its competitive position in a global market increasingly focused on climate action."

The full report is available at: http://calclimate.berkeley.edu/managing_GHGs_in_CA.html.

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NOTE: Media interviews with the authors of the report may be arranged by contacting Morrow Cater of Cater Communications at (415) 453-0430, or morry@catercommunications.com.

Managing Greenhouse Gas Emissions in California

January 2006

The California Climate Change Center at UC Berkeley
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Managing Greenhouse Gas Emissions in California

The California Climate Change Center at UC Berkeley

January 2006

EXECUTIVE SUMMARY

Alexander E. Farrell
W. Michael Hanemann
David Roland-Holst

Global climate change poses significant risks to the California economy. Recognizing and responding to these threats, Governor Schwarzenegger signed Executive Order # S-3-05 on June 1, 2005. This study includes eight independent reports assembled by two dozen experts to evaluate the economic implications of the Executive Order. It concludes that:

- Climate action in California can yield net gains for the state economy, increasing growth and creating jobs. Preliminary modeling indicates that just eight policies that were analyzed in detail can achieve almost half of the Governor's 2020 targets while increasing Gross State Product by about $60 billion and creating over 20,000 new jobs.

- There are numerous additional climate action initiatives beyond those that have been modeled, many of which will also improve California's economy. The analysis thus far indicates that California can likely reach the Governor's 2020 targets with a net gain for the state economy.

- Voluntary measures, while helpful, are insufficient to yield the required reductions. Designing an effective combination of regulatory standards, market-based approaches (such as a well-designed cap-and-trade program) and innovation policies is the best way to cost-effectively manage greenhouse gas emissions in California.

- Technology innovation, spurred by a combination of regulations and incentives, will be needed to shift the economy over the long term away from carbon-based fuels and meet the 2050 targets. By acting now, California can gain a competitive advantage by becoming a leader in the new technologies and industries that will come into existence worldwide due to the common goal of reducing GHG emissions.

Economic Modeling

Methods. A new economy-wide forecasting model, the Berkeley Energy and Resources (BEAR) model, was used to study a subset of policy scenarios designed to help meet the greenhouse gas (GHG) emission reduction goals. BEAR is a detailed, computable general equilibrium model of California's economy. It simulates demand and supply relationships across many sectors of the economy and tracks the linkages among them. It can thus be used to trace the ripple effects throughout the economy over time of new economic and technology policies.

The BEAR model was used to conduct a detailed, independent examination of policies based on the proposals from the Climate Action Team. The strategies are applied to different sectors of the economy, so the results for each sector can be reasonably interpreted as additive. Not all proposed policies could be studied with the available time and resources. Table ES-1 shows that further reductions beyond those analyzed here are possible and have yet to be studied.

Table ES-1. Climate Action Team Policies

Analyzed	Not Yet Analyzed	
Building Efficiency	Diesel Anti-idling	Combined Heat and Power
Vehicle Emission Standards	Renewable Portfolio Standard	Electric Sector Carbon Policy
HFC Reduction	Solar Initiative	Forest Management
Manure Management	Recycling	Forest Conservation
Semiconductors	Efficient Tires and Inflation	Fuels Management/Biomass
Landfill Management	Green Buildings	Urban Forestry
Afforestation	Other New Vehicle Improvements	Water Use Efficiency
Cement Manufacturing	Diesel Equipment Electrification	Transportation Energy Efficiency
	Biodiesel and Ethanol	Smart Land Use/Intelligent
	Heavy Duty Vehicle Emissions	Transportation
	Reduced Venting & Leaks in Oil/Gas	Enteric Fermentation

Results. The aggregate economic benefits of the eight policies analyzed here outweigh their costs, as shown in Table ES-2 and Figure ES-1. These results indicate the economic importance of indirect and linkage effects, which in this case tend to raise the economic benefits overall. Many GHG policies reduce energy use, which lowers spending on energy and allows the savings to be used on goods and services produced in California, increasing economic growth and employment. Furthermore, some of the spending that has been re-allocated to in-state use will be used to increase productivity through new investment and education. This effect will be compounded by state policies that promote the technological innovation and the use of new technologies. Because of our long experience with productivity growth in California, we know these benefits can transmit themselves across the entire economy, increasing competitiveness, profitability, and the standard of living.

We also know that there are many more low-cost options for the 2020 goals that are not included in the scenarios evaluated here by the BEAR model. For instance, some types of renewable energy are cost-competitive now, such as wind power, and the rapid rise in the installed capacity of renewables will bring experience and economies of scale, both of which will lower their costs in the future. In addition, combined heat and power technologies may reduce both energy consumption and GHG emissions. Furthermore, numerous technologies to reduce GHG emissions at low costs are currently being developed in laboratories both public and private, and can be expected to move to the marketplace in response to climate policies.

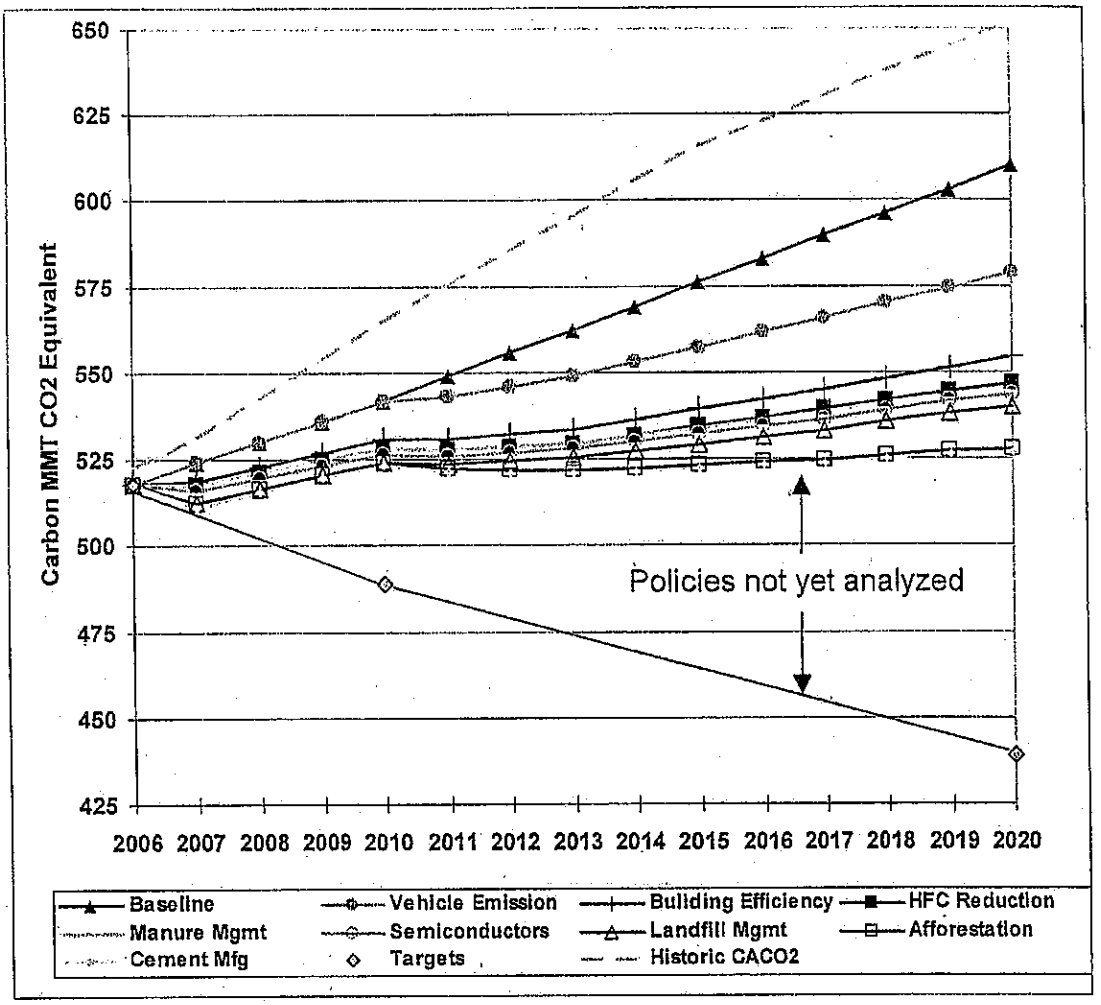
Table ES-2: Implications of Analyzed Climate Policies

2010						
	CO_2 Emission Reduction		Economic Benefit (Cost)		Labor Gain (Loss)	
Scenario	Amount (MMTCO2E)	Fraction of Goal (%)	$ Billions	% GSP	Thousands	% Total Employment
Baseline	542		1,830		18,243	
Vehicle Emission	0.4	-1%	0.89	0.05%	2.78	0.02%
Building Efficiency	-11	-20%	4.01	0.22%	8.04	0.04%
HFC Reduction	-3	-5%	-0.23	-0.01%	-0.83	0.00%
Manure Mgmt	0	0%	0.00	0.00%	0.01	0.00%
Semiconductors	-2	-3%	0.15	0.01%	-1.39	-0.01%
Landfill Mgmt	-2	-4%	-0.21	-0.01%	-0.90	0.00%
Afforestation	0	0%	0.00	0.00%	-0.12	0.00%
Cement Mfg	-1	-2%	0.33	0.02C	0.74	0.00%
Combined	**-19**	**-35%**	**4.95**	**0.27%**	**8.34**	**0.05%**

2020						
	CO_2 Emission Reduction		Economic Benefit (Cost)		Labor Gain (Loss)	
Scenario	Amount (MMTCO2E)	Fraction of Goal (%)	$ Billions	% GSP	Thousands	% Total Employment
Baseline	610		2,429		20,519	
Vehicle Emission	-31	-18%	50.26	2.07%	21.73	0.11%
Building Efficiency	-24	-14%	13.75	0.57%	14.26	0.07%
HFC Reduction	-8	-5%	-4.60	-0.19%	-6.80	-0.03%
Manure Mgmt	-1	-1%	0.01	0.00%	0.08	0.00%
Semiconductors	-2	-1%	0.85	0.03%	-4.61	-0.02%
Landfill Mgmt	-4	-2%	-0.86	-0.04%	-3.06	-0.01%
Afforestation	-13	-7%	-2.15	-0.09%	-3.53	-0.02%
Cement Mfg	-1	0%	1.55	0.06%	2.28	0.01%
Combined	**-83**	**-49%**	**58.80**	**2.42%**	**20.35**	**0.10%**

Source: Roland-Holst, Chapter 2. Forecasts from the BEAR model.

Figure ES-1: GHG Trends Under Analyzed Policies



Source: Roland-Holst, Chapter 2. Forecasts from the BEAR model.

Policy Response

Policy action is needed to address the challenge of climate change in California because it is an externality whose harmful consequences the free market will otherwise ignore.

Voluntary Measures. While helpful, there is no evidence that voluntary measures provide sufficient incentives to attain the Governor's targets. Efforts to improve public and corporate knowledge about GHG emission reduction possibilities and to encourage their voluntary adoption will foster responsible citizenship, empower those with the most detailed information to take cost-effective action, and can encourage innovation. However, the evidence shows that the practical, on-the-ground results of education, information, and voluntary approaches to environmental protection have been limited, and many of the supposed benefits of voluntary approaches may have occurred anyway due to other regulatory forces and economic trends.

Market-Based Policies. Often the most economically efficient approach to addressing externalities such as climate change is to bring the harmful effects *into* a market setting. Among the most powerful policy tools for doing this are cap–and–trade programs, which are particularly attractive for many GHGs because they are well–mixed worldwide. A cap–and–trade program is not necessarily a substitute for sectoral regulations or performance standards; in fact, if well designed, it can complement regulations and leverage their effectiveness, spreading their impact beyond the regulated sector and offering an incentive for additional emission reductions. Cap-and-trade programs provide strong incentives for the adoption of new low-GHG technologies, as well as some incentives for innovation. We believe that including a cap–and–trade program as part of the overall policy package is critical to achieving the Governor's targets at low cost. Specific recommendations for program design are outlined in Box ES-1.

Box ES-1. California Cap–and–Trade Program Recommendations

A careful evaluation of past policy experience and the relevant economics literature suggests that a successful cap–and–trade program in California will have the following characteristics:

- California should require reductions of GHGs under a mandatory emission cap.
- The program should aim for broad coverage; all gases and economic activities that can be monitored at low cost should be included.
- The initial distribution of allowances should embrace both efficiency and equity dimensions by involving an auction and also allocating some allowances for free.
- Unlimited use of banked allowances should be a central design feature.
- California should facilitate linkage of its GHG cap–and–trade program with others and promote symmetric treatment in the buying and selling of allowances.
- Emission offsets provide an opportunity for cost-savings and economic development, and thus should be included under conditions that reduce the prospects for fictional emissions reductions and inefficient revenue transfers.
- California should not use safety valves because they undermine the cap, incentives for technological innovation, and the prospects for linkage but instead rely on banking, offsets and linage to minimize the potential for high allowance prices.
- The program should be designed in a manner that avoids inequitable regional impacts or risks to public health.
- By balancing auctions and free allocations, it will be possible to compensate particularly affected communities or industries yet still keep the overall cost to the economy low and create some stimulus for innovation.
- Making large GHG emitters as well as load serving entities for electricity and natural gas the points of compliance can minimize leakage of emissions and economic activity out of the state.

New Technologies. Innovation will be essential to meeting the Governor's targets, especially meeting the mid-century target, which requires a profound refashioning of the economy away from carbon-based fuels. Such a major technological advance to support environmental goals will require additional policy action. The analysis of innovation highlights the conclusion that investment in R&D by private industry invests is less than would be optimal for society at large – perhaps only one half to one quarter the optimal amount. Government support for research and development and other "technology push" programs have been effective in the past, but they are usually not sufficient to drive innovation, in part because many innovators are interested in working on a technology only if they perceive that there will be a market for it. Thus, "demand pull" policies such as environmental regulations as well as technology incentives are highly effective in spurring innovation to reduce environmental impacts like climate change. A cap-and-trade program is one type of "demand pull" approach; while it undoubtedly will help California to meet the 2020 target, is not likely to be sufficient by itself to induce the type of technological innovation needed to meet the Governor's mid-century goal. Designing an effective combination of market-based regulations, regulatory standards, and innovation policies is an important issue for policy research in California.

Leadership. By adopting the policies evaluated in this study, California can demonstrate leadership in action by achieving the GHG mitigation goals set by the Governor. Globally, increasing GHG emissions are assumed to be essential to a growing economy. This is not true in California. The state can take an historic step by demonstrating that reducing emissions of GHG can accelerate economic growth and bring new jobs. Moreover, exercising leadership in this area plays to California's comparative economic advantage in the US and world economies as a first-tier innovation economy. California can gain a competitive advantage by acting early in the new technologies and industries that will come into existence worldwide around the common goal of reducing GHG emissions.

Future Research.

The challenge of managing GHG emission reductions in California (and globally) is significant, creating both immediate and long-term research needs. Among the most important near-term research needs is to extend the economic analysis conducted here to additional emission reduction strategies, and to improve the existing modeling capacity for advanced energy systems. In addition, designing appropriate policies to meet the Governor's targets will require better understanding of the behavioral aspects of energy consumption. Finally, technological and policy research is needed in order to invent and deploy the new energy system and other technologies needed to mitigate climate change.

Local Government Input to the California's Climate Action Team Report to the Governor and Legislature

Compiled and Submitted by ICLEI – Local Governments for Sustainability
January 31, 2005

ICLEI – Local Governments for Sustainability (ICLEI) has received both written and verbal comments on the Climate Action Team's (CAT) Report to the Governor and Legislature from local governments throughout California. Those comments are compiled in this submittal. Individual local governments may also be submitting their official comments directly to the Climate Action Team.

Ninety percent of California's population resides in urban areas. As the economic and population centers of the state, cities and counties are huge energy consumers, and thus large producers of greenhouse gas emissions. The powers that local governments wield over energy and fuel use make them critical allies in any state effort to curb these harmful emissions. It is in this spirit that ICLEI submits the following comments, as the leading organization working with municipalities on climate protection in California.

FEEDBACK ON THE CAT REPORT FROM LOCAL GOVERNMENTS PARTICIPATING IN ICLEI'S CITIES FOR CLIMATE PROTECTION™ CAMPAIGN

This "feedback report" is the culmination of ICLEI's efforts to coordinate local government review of and input on the CAT Report. That coordination included many individual conversations and email exchanges with local government elected officials and staff, as well as facilitation of local government testimony at the CAT public hearings, and one conference call to specifically discuss providing input to the Report. In addition, local governments will be submitting official written comment directly to CalEPA.

I. Encouragement for a Strong Report

On the whole, local governments feel that the CAT Report is an appropriately aggressive approach to ensuring that the Governor's climate protection targets are met. There is a great deal of support for the work of the CAT, and eagerness to participate in implementation of the actions called out in the Report, as described in detail below.

Some sample comments from written input:

"...the strategies proposed by the Climate Action Team show vision and provide solid direction as to how to address California's anthropogenic sources of greenhouse gas emissions." – **Marin County**

"We...thank the Team for producing a forward thinking report in a timeframe that reflects the urgency with which climate change must be addressed." – **San Francisco**

"This is a noble endeavor, and we applaud your effort." – **San Diego**

II. Inclusion of Local Governments in the Final Report

The strongest piece of feedback that ICLEI has received is that local governments must be included, and included prominently, in the final version of the Report. Local governments have been the leaders in the state on the climate issue for the past ten years, and that history should be acknowledged. Local governments have themselves made commitments to climate protection and are achieving reductions in greenhouse gas emissions that can only help the state's effort.

The following local governments are participating in ICLEI's Cities for Climate Protection™ Campaign. The table below highlights the progress they are making toward their commitments to reduce greenhouse gas emissions:

Jurisdiction	GHG Baseline	Target	Climate Action Plan
Arcata	X	20% below 2000	Draft
Berkeley	X	15% below 1990	X
Chula Vista	X	20% below 1990	X
Cloverdale	X	25% below 1990	X
Cotati	X	25% below 1990	X
Davis			
Fairfax	X		In progress
Healdsburg	X	25% below 1990	X
Los Angeles	X	20% below 1990	X
Marin County	X		In progress
Novato	X		
Oakland	X	15% below 1990	X
Petaluma	X	25% below 1990	X
Rohnert Park	X	25% below 1990	X
Sacramento	X	20% below 1990	
San Anselmo	X		
San Diego	X	15% below 1990	X
San Francisco	X	20% below 1990	X
San Jose	X	20% below 1990	
Santa Clara County			
Santa Cruz	X	20% below 1990	X
Santa Monica	X	14% below 1990	X
Santa Rosa	X	25% below 1990	X
Sausalito	In progress		
Sebastopol	X	25% below 1990	X
Sonoma City	X	25% below 1990	X
Sonoma County	X	25% below 1990	X
West Hollywood	X		
Windsor	X	25% below 1990	X

These local governments comprise 30% of California's population. Together, they have already reduced an identified 7 million tons of greenhouse gas emissions – that is roughly equal to 12% of the Governor's target. This demonstrates the power of local governments to realize the state's climate protection goals.

Sample comments:

"…local governments are not discussed in the draft recommendations of the CAT. We were pleased to hear that this oversight will be corrected. The impacts of climate change present serious threats to local governments and with over 90% of Californians living in urban areas, local governments must be involved in the State's strategy." – **San Francisco**

"Note that local governments have direct impacts on the following strategies: landfill methane capture; zero waste- high recycling; urban forestry; water use efficiency; transportation energy efficiency; smart land use and intelligent transportation." – **Sacramento**

"San Diego's GHG emissions are being produced by actions taken by City residents, businesses, and municipal operations. Collectively, the City is responsible for about 15.5 million tons of greenhouse gas emissions per year, based on 1990 emissions levels. By taking no action to curb current emissions levels, these would increase to 22.5 million tons per year by 2010. By adopting a goal of 15% reduction of baseline levels, the City hopes to reduce emissions to 13.2 million tons per year by 2010.Between 1990 and 2003, the City's programs were able to reduce GHG by a total of **3,814,000 tons** through changes in energy and water use and waste disposal.." – **San Diego**

"…local governments can serve as valuable allies in achieving many of the transportation-related goals outlined in the Report. Local governments have both the desire and ability to assist with implementation measures; traffic congestion negatively impacts productivity in the region and is of significant concern for local residents. Furthermore, local governments set policy related to land use and development decisions that influence transportation patterns." – **Marin County**

"[Santa Monica's climate protection] programs have resulted in reduced greenhouse gas emissions of 5% between 1990 and 2000. Based on projected growth and current programs in place, it is projected that greenhouse gas emissions will be 3% above 1990 levels by 2010. This figure compares favorably to a projected increase of 9.4% in the same period if no action had been taken." – **Santa Monica**

"We encourage the Climate Action Team to strongly emphasize the significance of municipal efforts in their report to the Governor and Legislature…In 2002 CCSF committed to an aggressive ghg reduction target of 20% below 1990 levels by 2012 and subsequently developed the Climate Action Plan of San Francisco (see: www.sfenvironment.com/aboutus/energy/cap.htm)." – **San Francisco**

III. Public Goods Charge on Transportation

Local governments are strongly in favor of a public goods charge on transportation. Transportation is the fastest growing source of greenhouse gas and air pollution emissions in communities. The local governments participating in the Cities for Climate Protection Campaign have found it difficult to secure the funding necessary to implement the types of policies and programs necessary to reduce GHG emissions from the transport sector. These measures include transit-oriented development, public transit, bicycle and pedestrian infrastructure, car-sharing programs, etc. A public goods charge on transportation fuels is a fair way of generating the funds to implement these activities.

Local governments have long benefited from public goods charges on electricity and natural gas. Indeed, these funding streams have been responsible for the implementation of many energy efficiency programs over the years which have made California a leader in conservation for the rest of the nation to follow. Use of public goods charges to achieve public benefits is nothing new, and it is entirely appropriate for such a charge to be applied to transportation fuels.

Sample comments:

"California is the 12th largest contributor to global warming in the world, with transportation as the single largest component of our emissions. Therefore, it is particularly important that our response to transportation be proportionate. Californians stand to benefit enormously from programs that increase alternative fuel use, boost fuel economy, and add public transportation options. To this end, proper investment is fundamental to ensuring that these strategies are implemented. The Team's recommendation to accomplish this via a public goods charge is appropriate and measured." – **Marin County**

"Note that the highest impacts on climate protection have to do with implementing smart growth land use and intelligent transportation options… both of which are spearheaded by local governments. Anything that could be done to include local governments in a proposed funding strategy would be appreciated." – **Sacramento**

"The State can extend its worldwide leadership in energy efficiency to the transportation sector by establishing a public goods charge that will provide funding to solve California's transportation dilemma." – **Santa Monica**

IV. Coordinated Financing

Local governments play such a major role in developing and implementing the policies and practices that reduce emissions, financing structures should allow for an adequate flow of financial resources to support these local efforts:

"A coordinated investment strategy process should include a methodology to provide funding for local governments that work towards improving the effects of climate change in their jurisdictions." – **Sacramento**

"Please include local governments in the GoCalifornia investment strategy." – **Sacramento**

V. Additional General Comments

The following comments were made during a conference call ICLEI convened for its members for the purpose of discussing how to provide input into the CAT Report:

- Local governments should be considered as "early adopters" and receive benefits accordingly, along with utilities and businesses.

- The state should institute AB 939-type legislation for greenhouse gas emissions, requiring a percentage reduction in GHGs by local governments by a target year, as AB 939 did with reducing the waste stream in the 1990's.

VI. Collaboration with Local Governments

There are many ways in which local governments can help the state achieve its climate protection goals. First, local governments are measuring their greenhouse gas emissions – they are establishing baselines for their municipal operations and communities, forecasting emissions growth and assessing reduction from implemented policies and programs. Second, they are implementing all the types of measures that the CAT has listed in its Report. It makes sense for there to be a strong working relationship between state agencies and local governments as the state moves forward with finalizing and implementing its climate action plan.

Sample comments:

"Local climate protection efforts directly contribute to the State targets and in many cases, for instance zero waste goals, local governments can implement greenhouse gas reductions in ways that the State cannot." – **San Francisco**

"We encourage the Climate Action Team to…convene a workshop to identify local governments that are already taking action on climate change, develop new state policies that enhance local governments ability to meet their ghg reduction targets, and identify existing policies that inhibit local ability to implement climate protection programs." – **San Francisco**

We recommend that the State work with ICLEI and other municipalities to support local efforts, enhance program development, and to conduct outreach to constituents." – **Marin County**

"We encourage the Climate Action Team to…work with ICLEI to identify local governments in California that already have in place climate protection programs, and consider including them as part of an Advisory Team." – **San Diego**

"Although planners are starting to embrace Smart Growth concepts, there is no coordination that I know of that correlates available fuel supplies over the next 50 years

with proposed growth scenarios. The State and local governments seem to favor highway and street funding over mass transit funding, yet intuition leads one to believe that supply and demand may not remain in equilibrium. There should be an effort to provide future fuel availability to local planners so that they can scenarios for fuel constrained futures." – **Sacramento**

"The City of Sacramento is considering development of a climate action plan for the City and or County that would be similar to the format of the California Climate Action Registry's General Reporting Protocol. If the State (or ICLEI or CCAR) could assist in providing information required by the protocol (e.g. kWh consumption, therm consumption, gallons of fuel consumption, etc.) for all Counties it would assist the City in developing baselines." – **Sacramento**

"We encourage the Climate Action Team to…Provide guidance and adequate resources to assist local governments in meeting their GHG emission reduction target. Once again, our collective success at the local level brings the State closer to realizing its goals." – **San Diego**

"The City will continue to test, promote, and adopt progressive policies and practices to reduce our impact on global warming. We urge the Climate Action Team and the State to support local government's efforts and work together to ensure that State, regional and local policies are aligned and result in the greatest possible emission reductions." – **Santa Monica**

THE PATH FORWARD: STATE / LOCAL CLIMATE POLICY COORDINATION

Any successful climate policy coordination effort between state and local levels of government must seek to achieve three main goals:

1) Removal of state level obstacles to local implementation of GHG reduction policies;
2) Identification of policies or actions the state can take to assist local governments in achieving their local climate protection goals; and
3) Identification of actions local governments are taking that can assist the states in achieving its climate protection goals.

ICLEI proposes the following options for facilitating ongoing coordination and collaboration between state agencies and local governments on the issue of climate protection. Varying levels of resources would be needed to implement each option.

Option 1 – Local Government Advisory Committee
A small group of local government officials is convened to serve for a specified time period to provide review and input into the state's developing climate action planning. Depending on resources, this group could meet in person or via conference calls.

Option 2 – One-time State / Local Climate Workshop
A one-time workshop would serve the purpose of two-way sharing of information. State agencies would provide information on how local governments can navigate the state government to locate funding and other resources to assist with implementation of

elements of their local climate action plans. The local governments would share information on the greenhouse gas assessment and reduction activities in their jurisdictions.

Option 3 – Technical Information Sharing and Assistance
State agencies and local governments convene to share data and quantification techniques for measuring greenhouse gas emissions. The focus of this effort is to incorporate local government data into the state's greenhouse gas emissions accounting, and to improve local government measuring of their own emissions.

Option 4 – Formal State / Local Climate Policy Coordination Project
This option consists of elements of the previous three. A permanent local government advisory committee would be established to participate in meetings with state agencies to assist in the development and implementation of climate policy. Workshops on a variety of topics would be convened to ensure collaboration among state and local officials. This would be viewed as the ongoing mechanism to ensure that local activities are accounted for in state GHG accounting, that there is coordination and information-sharing between state and local governments, and that there is continuous collaboration on developing new and innovative strategies to finance and implement reductions in greenhouse gas emissions.

ICLEI thanks CalEPA and the Climate Action Team for the opportunity to provide local government comment on the Report to the Governor and Legislature, and looks forward to close collaboration to help achieve the state's climate protection goals.

Written comments have been submitted by:
Marin County
City of Sacramento
City of San Diego
City and County of San Francisco
City of Santa Monica

Verbal comments have been provided to ICLEI by:
City of Rohnert Park
City of Santa Barbara
City of Santa Cruz
City of Santa Rosa
City of Sebastopol